

REMARKS

Consideration and allowance or declaration of interference is respectfully requested.

Applicants respectfully submit, in chart form, the basis for each claim limitation.

CLAIM 36	SUPPORT
A deicing and anti-icing composition comprising	Page 8, lines 3-4 – “The present invention provides novel compositions useful as deicing agents and/or anti-icing agents”
an aqueous solution which contains	Page 8, lines 31-34 – “In many preferred embodiments the deicing agents and/or anti-icing agents are used in about the same proportion as water” Page 8, lines 8-10 – “It is also envisioned that the compositions of the invention can be prepared for use in either a liquid or solid format.”
3-60 weight % of mixtures of sugars	Page 12, lines 17-19 – “Certain of these industrial process streams may include components such as low molecular weight sugars such as, for example, sorbitols, sucroses, maltoses and glucoses.” Page 8, lines 21-27 – “The amount of deicing or anti-icing agent of the present invention which is present in the total composition of the present invention can vary from about 5 to about 100 weight percent . . . preferably is present in an amount ranging from about 15 to about 80 weight percent . . .”
5-35 weight % of chloride salt	Page 7, lines 13-17 – “The present invention still further provides a method for reducing the amount of inorganic salt necessary to achieve deicing and/or anti-icing, comprising adding to the inorganic salt”

	Page 7, lines 7-9 – “. . . inorganic salts, such as sodium chloride, magnesium and/or calcium chloride and the like.”
balance of water	Page 8, lines 31-34 – “In many preferred embodiments the deicing agents and/or anti-icing agents are used in about the same proportion as water” Page 8, lines 8-10 – “It is also envisioned that the compositions of the invention can be prepared for use in either a liquid or solid format.”
Wherein the molecular weight of each of the sugars is in the range of about 180-1638.	Page 7, lines 16- “. . . comprising adding to the inorganic salt, an effective amount of deicing agent selected from the group consisting of glucosides, furanosides, maltosides, maltotriosides, glucopyranosides, sorbitols and other hydrogenation products of sugars, monosaccharides, maltodextrins and sucrose . . .” Page 12, lines 17-19 – “Certain of these industrial process streams may include components such as low molecular weight sugars such as, for example, sorbitols, sucroses, maltoses and glucoses. PLEASE NOTE: the molecular weight of glucose is 180 and sucrose is 342. PLEASE ALSO NOTE: Sucrose is a glucopyranoside and is a combination of glucose and fructose molecules attached across an aldside bond. At page 9, the originally filed specification discloses that the hydroxyl-containing component can comprise “maltodextrins.” Maltodextrins is a term that has been used for saccharide mixtures that consist of glucose, maltose, maltotriose, maltotetraose, maltopentaose etc (Walker, G.W., Whelan, W.J. (1957). These components have molecular weights as follows: maltotriose MW=504; maltotetraose MW=666; and maltopentaose MW=828. Moreover, the United States Food and Drug Administration defines maltodextrin as (21 CFR paragraph 184.1444): a non-

	<p>sweet, nutritive saccharide polymer that consists of D-glucose units linked primarily by alpha-1,4 bonds and that has a DE (dextrose equivalent) of less than 20. Industrially produced maltodextrins (with a certain average degree of polymerization) normally consist of a broad distribution of both linear and branched (containing (1-6) linkages) saccharides, <i>i.e.</i>, those having molecular weights ranging from 342 – 1200. Thus, the term “maltodextrin” supports the claims having the upper molecular weight range of “. . . to 1000” and “. . . to 1500.”</p> <p>Additional support for these claims can be found in the disclosure at page 9, line 9, which states that certain useful hydroxyl-containing organic compounds include “di- and polysaccharides.” A polysaccharide with 8 repeating units has a molecular weight of about 1440 (8 time 180 (the molecular weight of glucose)).</p>
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

CLAIM 37	SUPPORT
The composition of claim 36	See chart for Claim 36 above.
in which the chloride salt is at least one selected from the group consisting of sodium chloride, magnesium chloride and calcium chloride.	<p>Page 7, lines 13-17 – “The present invention still further provides a method for reducing the amount of inorganic salt necessary to achieve deicing and/or anti-icing, comprising adding to the inorganic salt”</p> <p>Page 7, lines 7-9 – “. . . inorganic salts, such as sodium chloride, magnesium and/or calcium chloride and the like.”</p>

CLAIM 38	SUPPORT
A deicing and anti-icing composition comprising	Page 8, lines 3-4 – “The present invention provides novel compositions useful as deicing agents and/or anti-icing agents”
an aqueous solution which contains	Page 8, lines 31-34 – “In many preferred

	<p>embodiments the deicing agents and/or anti-icing agents are used in about the same proportion as water”</p> <p>Page 8, lines 8-10 – “It is also envisioned that the compositions of the invention can be prepared for use in either a liquid or solid format.”</p>
3-60 weight % of mixtures of sugars	<p>Page 12, lines 17-19 – “Certain of these industrial process streams may include components such as low molecular weight sugars such as, for example, sorbitols, sucroses, maltoses and glucoses.</p> <p>Page 8, lines 21-27 – “The amount of deicing or anti-icing agent of the present invention which is present in the total composition of the present invention can vary from about 5 to about 100 weight percent . . . preferably is present in an amount ranging from about 15 to about 80 weight percent . . .”</p>
5-35 weight % of chloride salt	<p>Page 7, lines 13-17 – “The present invention still further provides a method for reducing the amount of inorganic salt necessary to achieve deicing and/or anti-icing, comprising adding to the inorganic salt”</p> <p>Page 7, lines 7-9 – “. . . inorganic salts, such as sodium chloride, magnesium and/or calcium chloride and the like.”</p>
0.15 to 10 weight % of a thickener	<p>Page 6, line 32 to page 7, line 3 – “Another benefit of the present invention is seen in that when carbohydrates are added to salts such as potassium acetate, the viscosity and wetting abilities of the anti-icing compound are increased. This has a dual effect of providing a compound which will not readily run off the surface, and of also providing a more persistent film which does not leave a dry powder after the surface later dries.”</p>
balance of water	<p>Page 8, lines 31-34 – “In many preferred embodiments the deicing agents and/or anti-icing agents are used in about the same proportion as water”</p> <p>Page 8, lines 8-10 – “It is also envisioned</p>

	that the compositions of the invention can be prepared for use in either a liquid or solid format.”
Wherein the molecular weight of each of the sugars is in the range of about 180-1638.	<p>Page 7, lines 16- “. . . comprising adding to the inorganic salt, an effective amount of deicing agent selected from the group consisting of glucosides, furanosides, maltosides, maltotriosides, glucopyranosides, sorbitols and other hydrogenation products of sugars, monosaccharides, maltodextrins and sucrose . . .”</p> <p>Page 12, lines 17-19 – “Certain of these industrial process streams may include components such as low molecular weight sugars such as, for example, sorbitols, sucroses, maltoses and glucoses.</p> <p>PLEASE NOTE: the molecular weight of glucose is 180 and sucrose is 342.</p> <p>PLEASE ALSO NOTE: Sucrose is a glucopyranoside and is a combination of glucose and fructose molecules attached across an aldside bond.</p> <p>At page 9, the originally filed specification discloses that the hydroxyl-containing component can comprise “maltodextrins.” Maltodextrins is a term that has been used for saccharide mixtures that consist of glucose, maltose, maltotriose, maltotetraose, maltopentaose etc (Walker, G.W., Whelan, W.J. (1957). These components have molecular weights as follows: maltotriose MW=504; maltotetraose MW=666; and maltopentaose MW=828. Moreover, the United States Food and Drug Administration defines maltodextrin as (21 CFR paragraph 184.1444): a non-sweet, nutritive saccharide polymer that consists of D-glucose units linked primarily by alpha-1,4 bonds and that has a DE (dextrose equivalent) of less than 20. Industrially produced maltodextrins (with a certain average degree of polymerization) normally consist of a broad distribution of both linear and</p>

	<p>branched (containing (1-6) linkages) saccharides, <i>i.e.</i>, those having molecular weights ranging from 342 – 1200. Thus, the term “maltodextrin” supports the claims having the upper molecular weight range of “. . . to 1000” and “. . . to 1500.”</p> <p>Additional support for these claims can be found in the disclosure at page 9, line 9, which states that certain useful hydroxyl-containing organic compounds include “di- and polysaccharides.” A polysaccharide with 8 repeating units has a molecular weight of about 1440 (8 time 180 (the molecular weight of glucose)).</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

CLAIM 39	SUPPORT
The composition of claim 38	See chart for Claim 38 above.
in which the chloride salt is at least one selected from the group consisting of sodium chloride, magnesium chloride and calcium chloride.	<p>Page 7, lines 13-17 – “The present invention still further provides a method for reducing the amount of inorganic salt necessary to achieve deicing and/or anti-icing, comprising adding to the inorganic salt”</p> <p>Page 7, lines 7-9 – “. . . inorganic salts, such as sodium chloride, magnesium and/or calcium chloride and the like.”</p>

Accordingly, Applicants respectfully submit that the present claims are fully supported by the originally filed specification.

Allowance of the above-identified application and/or declaration of interference with United States Patent No. 6,582,622 are respectfully requested. The Examiner’s attention also is directed to applicants’ United States Patent Application Serial No. 10/266,975, which copied claims from three other patents in the lineage of the ‘622 patent.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Al B Clement'.

Alan B. Clement
Reg. No. 34,563

MAILING ADDRESS

Hedman & Costigan, P.C.
1185 Avenue of the Americas
New York, NY 10036
(212) 302-8989